NETGEAR® BUSINESS



8-Port Gigabit Ethernet Smart Switches with Cloud Management



As a leading provider of network equipment for SMBs, NETGEAR understands the importance of providing great choice of port counts, PoE port counts and PoE power budgets that can adapt to the business's needs, whether in the hospitality, catering, education or retail domains. That is why NETGEAR launched these two new 8-port Gigabit Smart switches, one with PoE, one without PoE. Also, NETGEAR understands the importance of easy and centralized management for business networking. Therefore, NETGEAR now expands Cloud management capabilities to select models within its Smart switch line with these new versions of two of our most popular Smart switches.

The GS108T and GS110TP 8-port Gigabit Smart switches provides a great value, with configurable L2 network features like VLANs and PoE operation scheduling, allowing SMB customers to deploy PoE-based VoIP phones and IP surveillance. Advanced features such as Layer 3 static routing, IPv6 management, ACL, DiffServ QoS, LACP link aggregation and Spanning Tree will satisfy even the most advanced small business networks.

The GS110TP adds full 8 port PoE support for deployment of modern PoE devices. Cautious spender organizations can now deploy PoE devices connected to a cost effective switch, with a reasonable PoE power budget of 55W. Each port can provide

up to 30 watts to power up connected devices. Fanless, the GS110TP supports perfectly silent desktop operation or wall mounting.

Specifically for these 2 new models, additional features were added for full flexibility: Single sign-on registration for firmware and security updates and warranty entitlement. Remote Cloud management capability with NETGEAR Insight. By activating the NETGEAR Insight Cloud management, the users will enable fundamental management features allowing businesses simpler configuration and deployment from anywhere using the NETGEAR Insight app from mobile devices or the Insight Cloud portal from any device with a web browser.

Highlights

Flexible and cost-effective solution for SMB data, voice and video converged network

- Flexible and cost-effective solution for SMB data, voice and video converged network
- 8 Gigabit 10/100/1000BASE-T RJ-45 ports
- 1 PD port to receive power from another PoE switch or injector (GS108T only)

- 55W PoE budget available across 8
 Gigabit PoE+ (802.3at/802.3af) ports
 (GS110TP only)
- 2 dedicated Gigabit SFP fiber ports (GS110TP only)
- Non-blocking switching with 16Gbps and 20Gbps
- Fanless switches for silent operation in noise sensitative enviornment
- Flexible mounting options desktop and wall-mounting with VESA holes

Powerful Connectivity and Security Features

- Layer 3 static routing with 32 routes (IPv4) for inter-VLAN local routing
- Advanced VLAN support for better network segmentation
- L2/L3/L4 access control lists (ACLs) for granular network access control including 802.1x port authentication

Highlights

- Advanced per port PoE controls for remote power management of PoE connected devices including operation scheduling (GS110TP only)
- Advanced QoS (Quality of Service) for traffic prioritization including portbased, 802.1p and L2/L3/L4 DSCP-based
- Auto DoS (Denial of Service) prevention
- IGMP Snooping and Querier for multicast optimization
- Rate limiting and priority queuing for better bandwidth allocation
- Port mirroring for network monitoring
- Energy Efficient Ethernet (IEEE 802.3az) for maximum power savings
- Cable test to troubleshoot connection issues
- SNMP v1, v2c, v3 and RMON remote monitoring

Fully-integrated Cloud-manageable Devices*

Remote/Cloud management capability with NETGEAR Insight. Instantly activate NETGEAR Insight Cloud management from the web GUI, for simpler configuration and deployment from anywhere using the NETGEAR Insight app on mobile devices or the Insight Cloud portal through a web browser

Smart IT, not Big IT

- Easy to manage via web-based management GUI for multi-switch deployment
- NETGEAR Switch Discovery Tool (NSDT) to discover, register and access to the local browser interface to configure the switches
- Network Management System (NMS300), allowing all NETGEAR business products to be deployed and managed through this single interface

NETGEAR Quality and Reliability

 Worry-free limited lifetime warranty*, online technical chat support and Next Business Day (NBD) replacement.













Hardware-at-a-Glance

	FRONT				REAR	SIDE
Model Name	Form-Factor	10/100/1000BASE-T RJ-45 Copper Ports	1G SFP Ports	PoE/PoE+ Ports (Budget)	Power Supply	Fans
GS108T	Desktop	8	-	-	External DC 12V 1.0A	Fanless
GS110TP	Desktop	8	2 (Dedicated)	8 PoE+ (55W)	External DC 54V 1.25A	Fanless

Software-at-a-Glance

	LAYER 2+ / LAYER 3 LITE FEATURES							
Management	IPv4/IPv6 ACL and QoS	Static Routing	IPv4/IPv6 Multicast Filtering	VLANs	Auto-VoIP, Auto-Video	IEEE (802.3az) Energy Efficient Ethernet	Convergence	Link Aggregation/ Port Trunking
Web Browser-based GUI (HTTP/HTTPS); NETGEAR Insight mobile app or Insight Cloud portal for local or remote management from your mobile device, PC, Mac, or tablet; IPv4 and IPv6 management, SNMP, RMON	L2, L3, L4 Ingress	IPv4 32 Routes	IGMP Snooping, Querier, Fast Leave, L2 Multicast Router	Static, Dynamic, Voice, Video, 8K Max MAC (64 VLANs), Protocol based, GARP, GVRP	Yes	Yes	LLDP-MED, RADIUS, 802.1X	LACP and Manual Static LAGs (up to 8 LAGs with max 8 members)

Performance-at-a-Glance

Model Na	me Packet Buffer	CPU	ACL	MAC Address Table ARP Table VLANs	Fabric	Latency (64-Byte Packet)	IPv4 Static Routing
GS108T	E12K	500MHz single core	100 shared	8K Max MAC	16 Gbps line-rate	1G Copper: <3.85µs	20
GS110TP	512K	128MB RAM 32MB SPI FLASH	(ingress)	64 VLANs	20 Gbps line-rate	1G Copper: < 3.69 μs; 1G Fiber: < 3.02 μs	32



Features and Benefits

Hardware Features	
Fully-integrated Cloud-manageable Devices	Require no additional hardware (cloud keys, network portals, local servers, VPN or proxy appliances etc) to directly connect to the cloud and allow remote management. No additional hardware or software. Just switch to Insight Cloud management mode through Web browser-based user interface and go.
1000BASE-T Copper Ethernet and PoE+ (GS110TP only) connections	Support high-density VoIP, Surveillance and Wi-Fi AP deployments, scalable for future growth. Never face the risk of running out of PoE ports or PoE power budget.
1000BASE-X SFP ports (GS110TP only)	Two dedicated Gigabit SFP ports Dedicated SFP ports provide fiber uplinks without sacrificing any downlink copper Gigabit Ethernet port, and across long distances. Support for Fiber and Copper modules.
Silent Acoustics	Fanless design allows for silent operation, great for deployment in noise-sensitive environments.
Energy Efficient Ethernet (IEEE 802.3az)	Maximum power reduction for ongoing operation cost savings.
Desktop and Wall mount (VESA holes available)	Flexible deployment on desktop, wall or other location using 75mm VESA-compliant mounts.
Kensington Lock Slot	Prevent theft, removal, or tampering when used for desktop deployment.
Software Features	
Remote setup, management, and monitoring anywhere, anytime, from your mobile device, PC, Mac, or tablet	Build current network with future in mind. Ensure investment protection and a smooth migration to an IPv6-based network without switch replacement.
Auto-join and Configure (Zero-Touch Provisioning)	Additional Insight managed devices added to the network automatically inherit settings and configuration.
Multi-site, Multi-network Single Pane-of-Glass View	View and configure multiple networks across multiple sites, all from one single app; NETGEAR Insight.
Comprehensive IPv6 Support for Management, ACLs and QoS	Build current network with future in mind. Ensure investment protection and a smooth migration to an IPv6-based network without switch replacement.
IPv4	A simple way to provide segmentation of the network with internal routing through the switch reserving the router for external traffic routing only, making the entire network more efficient.
Robust security features: • 802.1x authentication (EAP) • Port-based security by locked MAC • ACL filtering to permit or deny traffic based on MAC and IP addresses	Build a secured, converged network with all types of traffic by preventing external attacks and blocking malware while allowing secure access for authorized users.
Comprehensive QoS features: • Port-based or VLAN 802.1p-based prioritization • Layer 3-based (DSCP) prioritization • Port-based egress rate limiting	Advanced controls for optimized network performance and better delivery of mission-critical traffic such as voice and video.



Features and Benefits

Software Features	
Auto-VoIP, Auto-Voice VLAN, and Auto-Video VLAN	Automatic Voice over IP prioritization (Auto-VoIP) simplifies most complex multi-vendor IP telephone deployments either based on protocols (SIP, H.323 and SCCP) or on OUI bytes (default database and user-based OUIs) in the phone source MAC address, providing the best class of service to VoIP streams (both data and signaling) over other ordinary traffic by classifying traffic, and enabling correct egress queue configuration. Similarly, Auto-Video VLAN enables IGMP snooping to minimize broadcast streams.
IGMP Snooping and MLD Snooping	Facilitate fast receiver joins and leaves for multicast streams. Save cost and improve network efficiency by ensuring multicast traffic only reaches designated receivers without the need of an extra multicast router.
Protected Ports	Ensure no exchange of unicast, broadcast, or multicast traffic between the protected ports on the switch, thereby improving the security of your converged network. This allows your sensitive phone conversations to stay private and your surveillance video clips can be forwarded to their designated storage device without leakage or alteration.
DHCP Snooping	Ensure IP address allocation integrity by only allowing DHCP messages from trusted DHCP servers and dropping malformed DHCP messages with a port or MAC address mismatch.
Dynamic VLAN Assignment (RADIUS)	IP phones and PCs can authenticate on the same port but under different VLAN assignment policies. Users are free to move around and enjoy the same level of network access regardless of their physical location on the network.
Port Trunking/Link Aggregation (LACP)	Build up bigger bandwidth to support aggregated uplink/downlink traffic or to provide redundant link(s). Aggregate up to 8 ports for 8Gbps connections.
Loop Prevention and Auto-DoS Prevention	Detect and prevent (auto port shutdown) accidental network loops and protect against DoS attacks.
PoE Timer and Scheduling (GS110TPv3 only)	Allows IT administrators to increase network security, better utilize network resources and conserve energy by scheduling or remotely controlling on/off of PoE ports.
Port Mirroring and Cable Test	Many-to-one port mirroring for better and quicker network diagnostics and troubleshooting. Cable test easily identifies bad Ethernet cables.
Dual Firmware Images	Dual firmware images for transparent firmware updates with minimum service interruption.
Firmware Updates from Cloud	Direct cloud-to-device firmware updates, initiated and/or scheduled using the Insight app, all from the palm of your hand, anytime, anywhere.



Simply activate NETGEAR Insight Cloud management to manage your network. Anytime. Anywhere.

By activating the NETGEAR Insight Cloud management, the users will enable fundamental management features allowing businesses simpler configuration and deployment from anywhere using the NETGEAR Insight app from mobile devices or the Insight Cloud portal from any device with a web browser.

Unique advanced management features of these Insight managed devices include:

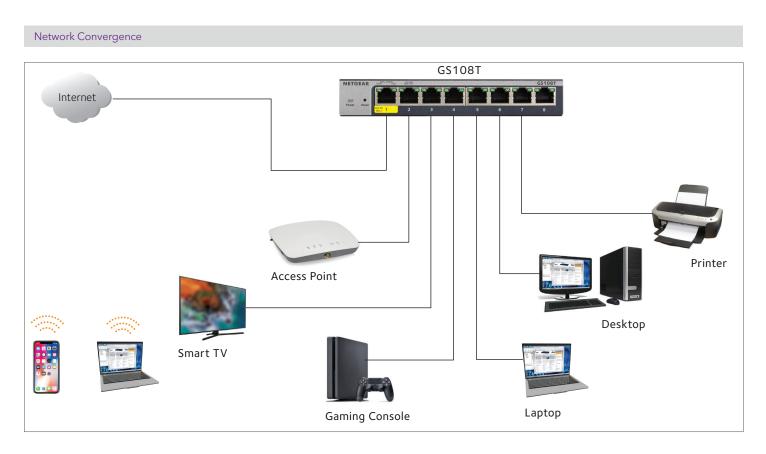
- Remote monitoring and management with performance dashboards and troubleshooting features including remote reboot, port
 and PoE advanced configuration including remote enable/disable/power-cycle, PoE scheduling, and firmware updates with autoschedule mode
- Single pane-of-glass multi-device, multi-network, and multi-site remote monitoring and notifications with the NETGEAR Insight app
- Full-fledged local or remote access for configuration, management, and monitoring on a larger display using your tablet, laptop, or desktop computer through the NETGEAR Insight Cloud portal
- Configurable in-app and email alerts and notifications
- Auto-join and configure (zero-touch provisioning) for additional Insight managed devices added to the network
- Centralized network configuration (policies) across Insight managed switches, and access points for VLANs, ACLs, QoS, LAGs, etc.
- Cloud-based network administration, monitoring, and firmware management

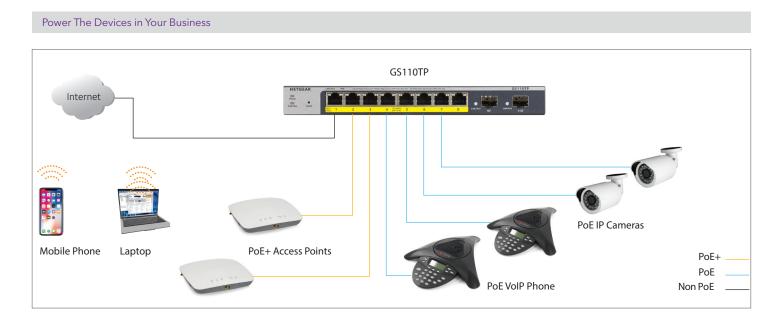
For more information about NETGEAR Insight-manageable device settings, please see at:

https://www.netgear.com/support/product/Insight.aspx



Application Sample







Technical Specifications

Technical Specifications	GS108Tv3	GS110TPv3	
Gigabit Ethernet RJ-45 Copper ports (10M/100M/1G) - 1000BASE-T	8	8	
PoE/PoE+ ports	N/A	8 PoE+ (55W PoE budget)	
Gigabit SFP (fiber) ports (100M/1G) - 1000BASE-X		2 (dedicated)	
Power Supply	External DC 12V 1.0A	External DC 54V 1.25A	
Kensington Lock	Yes (rear)	Yes (rear)	
LEDs			
Front (port side) (per device)	Power	Power, PoE Max	
Front (port side) (per port)	Speed/Link/Activity	Speed/Link/Activity (left), PoE Power (right)	
Unified Network Management (Discovery, Setup, Monit	oring, and Management) through NETGEA	R Insight Cloud Management	
Discovery, setup, monitoring and management	NETGEAR Insight mobile app on phone or t or tablet web browser	ablet; Insight Cloud portal from PC, Mac,	
Remote/Cloud management	Anywhere, anytime, from the palm of your he PC, Mac, or tablet web browser using the Ins		
Centralized network configuration (policies)	Centralized network configuration (policies) access points for VLANs, ACLs, QoS, and LA		
Device auto-join and configure (zero-touch provisioning)	Additional Insight managed devices added network configuration	to the network automatically inherit the	
Multi-site, multi-network single pane-of-glass view	Manage multiple sites, locations, and networks in a single view using the Insight mob app or Insight Cloud portal		
Multi-switch, multi-port concurrent configuration for ACLs, VLANs, QoS, PoE, etc	Apply settings and policies on multiple ports all at the same time using the Port Config Wi		
Performance Specifications			
CPU	500MHz si 128ME 32MB SP	BRAM	
Packet buffer memory (Dynamically shared across only used ports)	51:	2K	
Forwarding modes	Store-and	-forward	
Bandwidth (non-blocking, full duplex)	16G	bps	
Priority queues	8		
Priority queuing	ity queuing Weighted Round Robin (WRR) and Strict Priority		
MAC Address database size (48-bit MAC addresses)	81	<	
Multicast groups	256		
Number of IPv4 static routes	32		
Number of VLANs	64		
Number of DHCP snooping bindings	256		
Access Control Lists (ACLs)	100 shared for MAC	C, IP and IPv6 ACLs	
Packet forwarding rate (64 byte packet size) (Mfps or Mpps)	11.9	14.8	



Performance Specifications	GS108Tv3	GS110TPv3
1G Copper latency (µsec)	64-byte: 3.847 µsec 1518-bye: 4.047 µsec	64-byte: 3.693 µsec 1518-bye: 3.897 µsec
(64-byte; 1518-byte; 9216-byte frames)	9216-byte: 3.784 µsec	9216-byte: 3.616 µsec
1G SFP Fiber latency (µsec)		64-byte: 3.022 µsec
(64-byte; 1518-byte; 9216-byte frames)		1518-bye: 3.237 µsec 9216-byte: 2.959 µsec
Jumbo frame support	Up to 10K	packet size
Acoustic noise level @ 25°C (dBA) (ANSI-S10.12)	0 dBA (fanless)	0 dBA (fanless)
Mean Time Between Failures (MTBF) @ 25°C	2,388,657 hrs (272 yrs)	1,200,041 hrs (137 yrs)
POE Configuration		
Number of PoE (802.3af) / PoE+ (802.3at) ports	N/A	8 PoE+
Total PoE power budget (watts)	N/A	55 W
Advanced per-port PoE controls (enable/disable/power limit)	N/A	Yes
Advanced per-port PoE scheduling/timers	N/A	Yes
L2 Services - VLANs		
IEEE 802.1Q VLAN Tagging	Y	es
Protocol-based VLANs	Y	, es
MAC-based VLANs	Y	es
Auto-VoIP VLAN / Auto-Voice VLAN	Yes, based on OUI bytes (default database MAC address	and user-based OUIs) in the phone sourc
Auto-VoIP	Yes, based on protocols (SIP, H.323 and SC	CP). Prioritzes traffic to a higher queue.
Voice VLAN	Yes, based on either VLAN ID or 802.1p priconnecting VoIP phone using LLDP-MED.	ority, packets are passed onto the
Auto-Video VLAN	Υ	es
L2 Services - Availability		
Broadcast, multicast, unknown unicast storm control	Y	, es
IEEE 802.3ad - LAGs (LACP)	Υ	es
IEEE 802.3x (full duplex and flow control)	Y	, es
IEEE 802.1D Spanning Tree Protocol	Υ	es
IEEE 802.1w Rapid Spanning Tree Protocol	Y	es
IEEE 802.1s Multiple Spanning Tree Protocol	Y	, es
L2 Services - Multicast Filtering		
IGMP snooping (v1, v2 and v3)	Y	, es
MLD snooping support (v1 and v2)	Y	es
IGMP snooping queries	Y	, es
Block unknown multicast	Y	, es
Multicast groups	2	56



L3 Services - DHCP	GS108Tv3 GS110TPv3	
DHCP client	Yes	
DHCP snooping	Yes	
Number of DHCP snooping bindings	256	
L3 Services - Routing		
IPv4 static routing	32	
VLAN routing	Yes	
Host ARP table / NDP cache (number of entries)	512 ARP	
ICMP Router Discovery Protocol (IRDP)	Yes	
Link Aggregation		
IEEE 802.3ad - LAGs (LACP)	Yes	
Manual Static LAG	Yes	
# of Static or LACP LAGs # of members in each LAG	8 LAGs with max 8 members in each LAG	
Network Monitoring and Discovery Services		
802.1ab LLDP	Yes	
LLDP-MED	Yes	
SNMP	Yes	
RMON group 1,2,3,9	Yes	
Network Security		
IEEE 802.1x	Yes	
Guest VLAN	Yes	
RADIUS-based VLAN assignment via .1x	Yes	
MAC-based .1x	Yes	
RADIUS accounting	Yes	
Access Control Lists (ACLs)	L2/L3/L4	
IP-based ACLs (IPv4 and IPv6)	Yes	
MAC-based ACLs	Yes	
TCP/UPD-based ACLs	Yes	
MAC lockdown	Yes	
MAC lockdown by the number of MACs	Yes	
Control MAC # Dynamic learned entries (per port)	600	
Control MAC # static entries	600	
IEEE 802.1x RADIUS port access authentication/type	Yes	
Broadcast, multicast, unknown unicast storm control	Yes	
DoS attacks prevention	Yes	
Protected ports	Yes	



Quality of Service	GS108Tv3 GS110TPv3	
Port-based rate limiting	Yes, egress	
Port-based QoS	Yes	
Support for IPv6 fields	Yes	
DiffServ QoS	Yes, ingress	
IEEE 802.1p COS	Yes	
Destination MAC and IP	Yes	
IPv4 and v6 DSCP	Yes	
IPv4 and IPv6 ToS	Yes	
TCP/UDP-based	Yes	
Weighted Round Robin (WRR)	Yes	
Strict priority queue technology	Yes	
Auto-VoIP VLAN / Auto-Voice VLAN	Yes, based on OUI bytes (default database and user-based OUIs) in the ph MAC address	one source
Auto-VoIP	Yes, based on protocols (SIP, H.323 and SCCP). Prioritzes traffic to a high	er queue
Voice VLAN	Yes, based on either VLAN ID or 802.1p priority, packets are passed o connecting VoIP phone using LLDP-MED	nto the
Auto-Video VLAN	Yes	
Other Features		
Advanced per-port PoE controls (enable/disable/power limit)	N/A Yes	
Advanced per-port PoE scheduling/timers	N/A Yes	
Loop detection & prevention	Yes (both)	
DNS Client	Yes	
Option to enable/disable BPDU flooding when STP is disabled	Yes	
Option to enable/disable the flooding of EAPOL when 802.1x is disabled	Yes	
Management, Monitoring & Troubleshooting		
Cloud/Remote management	Yes	
Insight mobile app & Insight Cloud	Yes	
Portal management	Yes	
uPnP Discovery	Yes	
Networking monitoring	Yes	
Data/performance logs	Yes	
Centralized network configuration/policies (network-centric management)	Yes	
Device auto-join and configure (zero-touch provisioning)	Yes	
Multi-site, multi-network single pane-of-glass view	Yes	
Multi-switch, multi-port concurrent configuration	Yes	
Network/global password (for all Insight managed devices on a network)	Yes (per network/subnet via NETGEAR Insight mobile app and Insight Clou	d portal)



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Y	
	Y es
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'	res es
)	Yes
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)	res .
Y	Yes
)	res .
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Y	Yes
)	r'es
)	res .
)	r'es
Yes	(v1.2)
)	res .
Y	Yes
)	res .
Y	Yes
5.5 W	15.1 W
N/A	69.5 W
1.9 W	4.3 W
Max: 18.66 BTU/hr Min: 6.62 BTU/hr	Max: 237.38 BTU/hr Min: 14.53 BTU/hr
Yes (deactiva	ated by default)
	ated by default)
Yes (deactiva	, ,
Yes (deactiva Fanless	Fanless
	•
	•
Fanless 158 x 101 x 27 mm	Fanless 236 x 101 x 27 mm
	5.5 W N/A 1.9 W Max: 18.66 BTU/hr Min: 6.62 BTU/hr



Data Sheet | **GS108Tv3**, **GS110TPv3** 8-Port Gigabit Ethernet Smart Switches with Cloud Management

Environmental Specifications	GS108Tv3	GS110TPv3
Operating		
Operating Temperature	0° to 40°C (3	2° to 104°F)
Humidity (relative)	95% maximum relative hum	idity (RH), non-condensing
Altitude	10,000 ft (3,000	m) maximum
Storage		
Storage Temperature	-20° to 70°C (-	- 4° to 158°F)
Humidity (relative)	95% maximum relative hum	idity (RH), non-condensing
Altitude	10,000 ft (3,000	m) maximum
Warranty and Support		
Hardware Limited Warranty	Limited Lifetime* (switch) 2 years (power adapter)	
Next-Business-Day (NBD) Replacement	Limited Lifetime*	
Technical support via phone	90 days free from date of purchase*	
24x7 Online Chat Techinical support	Limited L	ifetime*
ProSUPPORT OnCall 24x7 Service Packs**	Category S1 PMB0S11-10000S PMB0S31-10000S PMB0S51-10000S	Category S2 PMB0S12-10000S PMB0S32-10000S PMB0S52-10000S
Package Content		
Smart switch	✓	✓
Power adapter	✓	✓
Power cord (localozed to region of sale)	✓	✓
Wall mount kit and rubber footpad	✓	✓
Installation guide	✓	✓



Data Sheet | **GS108Tv3, GS110TPv3**8-Port Gigabit Ethernet Smart Switches with Cloud Management

Ordering Information	
GS108T	
GS108T-300AUS	Asia Pacific
GS108T-300JPS	Japan
GS108T-300NAS	North America, Latin America
GS108T-300PES	Europe
GS108T-300PRS	China
GS108T-300UKS	United Kingdom
GS110TP	
GS110TP-300AJS	Asia Pacific
GS110TP-300EUS	Europe
GS110TP-300INS	India
GS110TP-300NAS	North America, Latin America
GS110TP-300PRS	China
Optional Modules, Software Licenses and Accessories	
AGM731F	SFP Transceiver 1000BASE-SX (Short range, multimode)
AGM732F	SFP Transceiver 1000BASE-LX (Long range, single mode)
AGM734-10000S	SFP Transceiver 1000BASE-T Copper RJ45 GBIC
AXM765	SFP+ Transceiver 10GBASE-T RJ45 GBIC

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NETGEAR, Inc. 350 E. Plumeria Drive, San Jose, CA 95134-1911 USA, 1-888-NETGEAR (638-4327), E-mail: info@NETGEAR.com, www.NETGEAR.com

DS-GS108T/GS110TP-26Jan23

This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and covers unmodified hardware, fans and internal power supplies - not software or external power supplies, and requires product registration at https://www.netgear.com/business/registration within 90 days of purchase; see https://www.netgear.com/about/warranty for details. Intended for indoor use only.

[&]quot;The NETGEAR OnCall 24x7 contract provides unlimited phone, chat and email technical support for your networking product.

[†] NETGEAR #1 in US Market Share according to NPD data for Unmanaged and Smart Switches, September 2019. NETGEAR #1 in Europe Market Share according to Context data for Unmanaged and Smart Switches, September 2019.